

[DC-8 | AIRMAP](#)

INTEX-A DC-8 Sensors/Parameters

Sensor(s)	Parameter(s)
NO/O ₃ chemiluminescence	Ozone
UV Lidar	Ozone & aerosol profile
Laser Induced Fluorescence	NO, NO ₂ , HCHO
Laser Induced Fluorescence & thermal dissociation	NO ₂ , NO _y
GC-ECD/PID/RGD	PANs, OVOCs, nitriles
Chemical Ionization Mass Spectrometry	HNO ₃ , H ₂ O ₂ , organic acids
Derivative HPLC & fluorescence	H ₂ O ₂ , CH ₃ OOH, HCHO
Tunable Diode Laser Absorption Spectrometry	HCHO
Laser Induced Fluorescence	OH, HO ₂ , naphthalene
Chemical Ionization Mass Spectrometry	SO ₂ , HNO ₄
Whole air sample collection; GC-FID/EC/MS analysis	VOCs (NMHC, halocarbons, alkyl nitrates)
Tunable Diode Laser Absorption Spectrometry	CO, CH ₄ , N ₂ O
Non-Dispersive Infrared	CO ₂
Open path Tunable Diode Laser Absorption Spectrometry	H ₂ O
Particle Into Liquid Sampling (PILS)/IC	Aerosol bulk ionic composition
Mist chamber/IC	Bulk aerosol composition, HNO ₃
Particle measuring probes, differential mobility analyzer, CN counters	Aerosol composition, microphysics, and optical properties
CN counters, cloud aerosol & precipitation Spectrometer, soot photometer	Aerosol number density, size, light scattering properties; cloud liquid water content
Spectrally resolved radiometer, Zenith & Nadir	Actinic fluxes & photolytic frequencies
DC-8 Data Acquisition and Distribution, Cryogenic hygrometer, actinometer	NAV, MET, In Situ Water Vapor/Cryo and J(NO ₂) Measurements

INTEX-A AIRMAP Parameters

Instrument and Sensor information are provided in data file header.

Parameters:

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| <ul style="list-style-type: none"> • Aerosols • Ammonium (NH4) • Calcium (Ca) • Carbon Monoxide (CO) • Carbon Monoxide (CO₂) | <ul style="list-style-type: none"> • Magnesium (Mg) • Meterology data • Methane (CH4) • Nitric Oxide (NO) • Nitrogen Dioxide (NO₂) | <ul style="list-style-type: none"> • Nitrate (NO₃) • Nitrogen Oxides (NOy) • Nitric Acid (HNO₃) • Ozone (O₃) • Photolysis rate of Nitrogen Dioxide (JNO₂) | <ul style="list-style-type: none"> • Potassium (K) • Relative humidity • Sodium (Na) • Sulfur Dioxide (SO₂) • Sulfate (SO₄) |
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